



Rocky Mountain
Remediation Services, L.L.C.
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INSTRUCTION

EWP IMPLEMENTATION INSTRUCTION

OPS-INSTR.002

Revision 0

Date Effective: 08/07/97

APPROVED: FPL [Signature] 8/7/97
Sr. Vice President, Operations

Page 1 of 15

1.0 INTRODUCTION

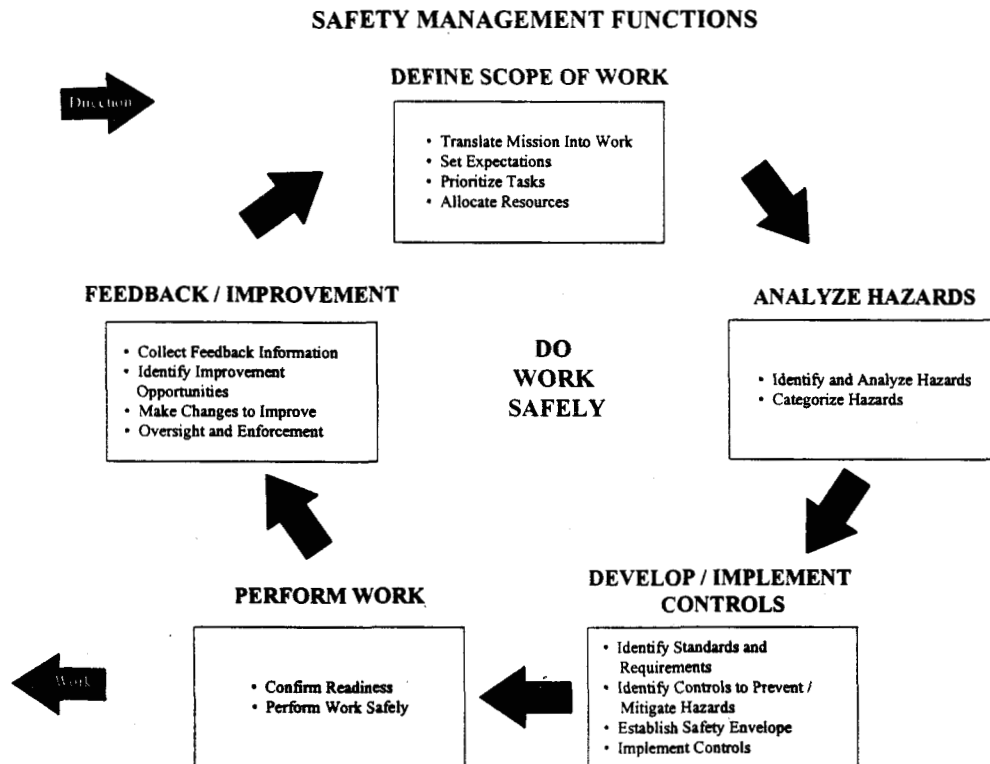
At the Rocky Flats Environmental Technology Site (The Site), the Department of Energy, Kaiser-Hill (K-H), Rocky Mountain Remediation Services (RMRS) and Safe Sites of Colorado (SSOC), with support from EH Technical Assistance personnel, are conducting a cooperative effort to improve worker safety and productivity in all phases of work planning and execution that includes personnel involvement, ownership, efficiency, and productivity.

DOCUMENT CLASSIFICATION
REVIEW WAIVER PER
CLASSIFICATION OFFICE

ADMIN RECORD
A SW-A-002485

2.0 PURPOSE

Enhanced Work Planning is the natural implementing vehicle for the five key elements of the Defense Nuclear Facility Safety Board recommendation 95-2. These key elements -- work scope reviewed and prioritized; work scope analyzed for hazards and categorized based on risk; controls established based on hazards, risk, and experience of workers; work performed safely, efficiently, with appropriate degree of supervision; and continuous improvement and lessons learned -- encompass the essence of an effective, efficient, and safety conscience work process. EWP also serves as a tool to implement the Integrated Safety Management (ISM) process within RMRS. The ISM process explains how safety is integrated into management and work practices at all levels.



3.0 SCOPE

The guidelines of these instructions apply to work activities at the site for RMRS facilities, as determined by the PDIT's.

4.0 DEFINITIONS

4.1 Enhanced Work Planning (EWP):

EWP is a process that evaluates and improves the program by which work is identified, planned, approved, scheduled, coordinated, controlled, and executed. The key elements of EWP are:

- **Line Management Ownership**
EWP must be sponsored (not imposed upon) by line management. Successful EWP projects are characterized by managers with a positive attitude about safety and work efficiency, who seek the organizational support necessary to implement EWP tenants; and have the leadership skills, knowledge, and authority to use EWP to improve their programs.
- **A Graded Approach to Work Management, Based on Risk and Complexity**
Varying levels of hazards, hazard controls, and work complexity dictate that not every work task requires the same degree of rigor in planning and execution. EWP develops criteria for determining which tasks can be performed better, faster, safer, and cheaper by relying on the skill-of-craft.
- **Worker Involvement Beginning at the Earliest Phases of Work Management**
"Worker" refers to anyone with a role in accomplishing the work. The unique perspective of line workers injects "reality" into the work management process. Workers' morale improves when their opinions and expertise are demonstrably valued.
- **Organizationally Diverse Teams**
Work management teams consist of the personnel responsible for overall planning and execution of the task. These personnel may include: planners, engineer, workers, safety and health professionals, radiological control specialists, trainers, and line managers.
- **Communication and Lessons Learned**
Considerable time and money can be saved by building on existing, successful programs from other DOE sites. Programs, procedures, software tools, and training courses are freely shared among EWP sites to minimize duplicative efforts and maximize resource utilization.

4.2 Hazard Analysis

Any process used to systematically anticipate, identify, evaluate, control, and document all known and potential workplace safety and health hazards to the workers.

4.3 Job Hazard Analysis (JHA)

A process of hazard analysis which breaks down a job or task into component steps, examines each step to determine what hazard(s) exist or might occur, and establishes actions to eliminate or control the hazard.

5.0 GOALS

The Site Enhanced Work Planning program is designed to provide a safer, more efficient work environment by:

- Encouraging worker participation in the initial work planning process to enhance the effectiveness of safety and work efficiency.
- Providing hazard analysis and controls are appropriate for the job.
- Improving worker knowledge of safety requirements.
- Fostering teamwork between hourly and salary personnel.
- Improving the technical accuracy and workability of work packages.
- Balancing the degree of work instruction, skill-of-craft, and worksite supervision.
- Reducing the overall time to plan, review, and approve work packages.
- Promoting realistic, resource loaded schedules.
- Enhancing job coordination and improving the efficient execution of the work.
- Continuous improvement through real-time feedback.

Enhanced Work Planning considers the entire work process and continually asks the questions necessary to implement a safer, more efficient work control process. However, in the traditional approach to the work control process, technical specialists, management, and workers are given work packages for review during various phases of the work planning process. When changes are made by one or more of the reviewers, the package must be reviewed again by all parties. This sequential review process is inefficient and tends to create conflict between planners, reviewers, and workers. Enhanced Work Planning is designed to improve the traditional work control process, primarily through extensive communication and feedback from the appropriate mix of personnel responsible for the work.

6.0 ROLES & RESPONSIBILITIES

Convened Group

The purpose of the Convened Group is to provide consistent direction and integration of the implementation of Integrated Safety Management Programs. In addition, the Convened Group assists in resolving issues and barriers that impede the effective functioning of the Process Development and Improvement Teams (PDIT's) and Working Teams (WT).

The Convened Group meets as required to evaluate and approve PDIT recommendations, enhancements and performance indicators.

The membership of this team consists of senior management representative(s) from Kaiser-Hill and all major subcontractors.

Process Development Improvement Teams (PDIT)

The purpose of the PDIT's is to:

- Review and enhance various site processes, which include work control and work execution.
- Develop, evaluate and provide feedback for process improvements to the EWP to ensure consistency throughout plantsite with respect to EWP.
- The PDIT meets periodically to discuss team issues, progress, and to evaluate performance indicators. The Team also interfaces with the Convened Group and WT's to assure overall site integration and consistency.

PDIT membership consists of the EWP Program Managers, Area Subject Matter Experts, and crafts.

Working Teams (WT)

The purpose of the WT's is to participate in the planning, scheduling, and execution of work tasks, that includes contributing to: hazard analysis and abatement; work instruction development; realistic resource loading for the work; job coordination; effective job execution; and feedback that assures continuous improvement.

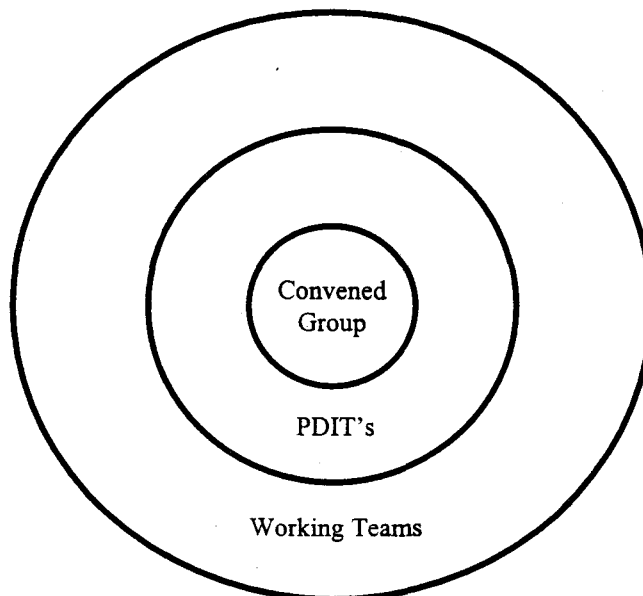
The WT's meet as necessary in the performance of their work assignments.

The membership of each Team consists of, as a minimum: (Other disciplines may be used as needed.)

- The Work Management Facilitator (EWP Program Manager in most cases)
- Team Lead (as assigned by Facility/Project Manager)
- Planning
- Industrial Hygiene and Safety (IH&S)
- Radiological Protection
- Engineering
- Craft personnel
- EH Mentor

EWP Program Infrastructure

The following diagram depicts the EWP Program's Infrastructure. This was put into place to provide the necessary communication and support structure for the success of EWP.



Work Management Facilitator (EWP Program Manager in most cases)

- Facilitate and assist each WT Leader in coordinating team meetings, work planning sessions, and walkdowns.
- Assist each WT Leader in resolving issues that encumber the team from producing and executing work packages safely and efficiently.
- Provide guidance in the development, trending, and evaluation of performance indicators.
- Communicate problems, successes and lessons learned between the WT's and the PDIT via verbal communication and progress reports.
- Attend team meetings (planning sessions) and walkdowns, as needed.
- Develop, trend, and evaluate performance indicators.

Working Team Leader

- Assemble a multi-disciplinary team that is appropriate for the work task.
- Discuss the job scope and solicit input from team members relative to: how to perform the job; level of detail needed in work instructions; job hazards & abatements; estimated manpower and time needed to complete the job; potential scheduling and/or operational conflicts; and job coordination.
- Schedule and perform a walkdown of the job with the team members.
- Complete the hardcopy job hazard analysis (JHA) checklist during the walkdown (IWCP-3).
- Discuss job tasks in detail, determining the level of work instructions and/or skill-of-craft, as appropriate.
- Prepare the draft work instructions that includes the JHA.
- Solicit final review and comments from the team members. Incorporate comments, as appropriate. Communicate the disposition (incorporated, not incorporated and why) of the comments the team members.
- Obtain approvals.
- As a minimum, solicit comments concerning the effectiveness of the work package including: work instruction effectiveness, JHA accuracy, coordination, and actual manpower and time needed to complete the task.
- Use the feedback information to improve pending and future tasks.

Working Team Members

Participate in the joint planning of the work to include:

- Hazard analysis and abatement.
- Development of work instructions.
- Manpower estimates and time.
- Job coordination.
- Work improvements.
- Walkdowns.
- Meetings.

Building Operations

- Coordinates the availability of required resources from support organizations for the JHA walkdown process.
- Supports the PDIT in pre-selecting the job/projects.

EH Technical Assistance

EH Technical assistance will be provided as follows:

- Support in the overall planning, conducting, and reporting of the pilot projects.
- Participate on the PDIT's to assist in efficiently performing the overall work processes, developing improvements in safety and productivity, and tracking, trending, and reporting the results.
- Assist in developing performance objectives and indicators to measure progress.
- Facilitate communication and interaction among WT participants, other Rocky Flats organizations, and other DOE sites.
- Assist in communicating successes, progress, and lessons learned to Rocky Flats organizations, DOE complex sites, DOE-HQ, Defense Nuclear Safety Board, and other appropriate organizations.
- Provide technical advice, consultation, and support in all areas of the maintenance and work control processes, radiological control, safety and health, industrial hygiene, medical surveillance, and other areas, as requested.

- Import lessons learned from other improvement projects across the DOE complex.
- Be the point of contact for other EH Technical Assistance resources that may be requested, on an as needed basis.

7.0 EWP PROCESS

The following describes the process for EWP implementation.

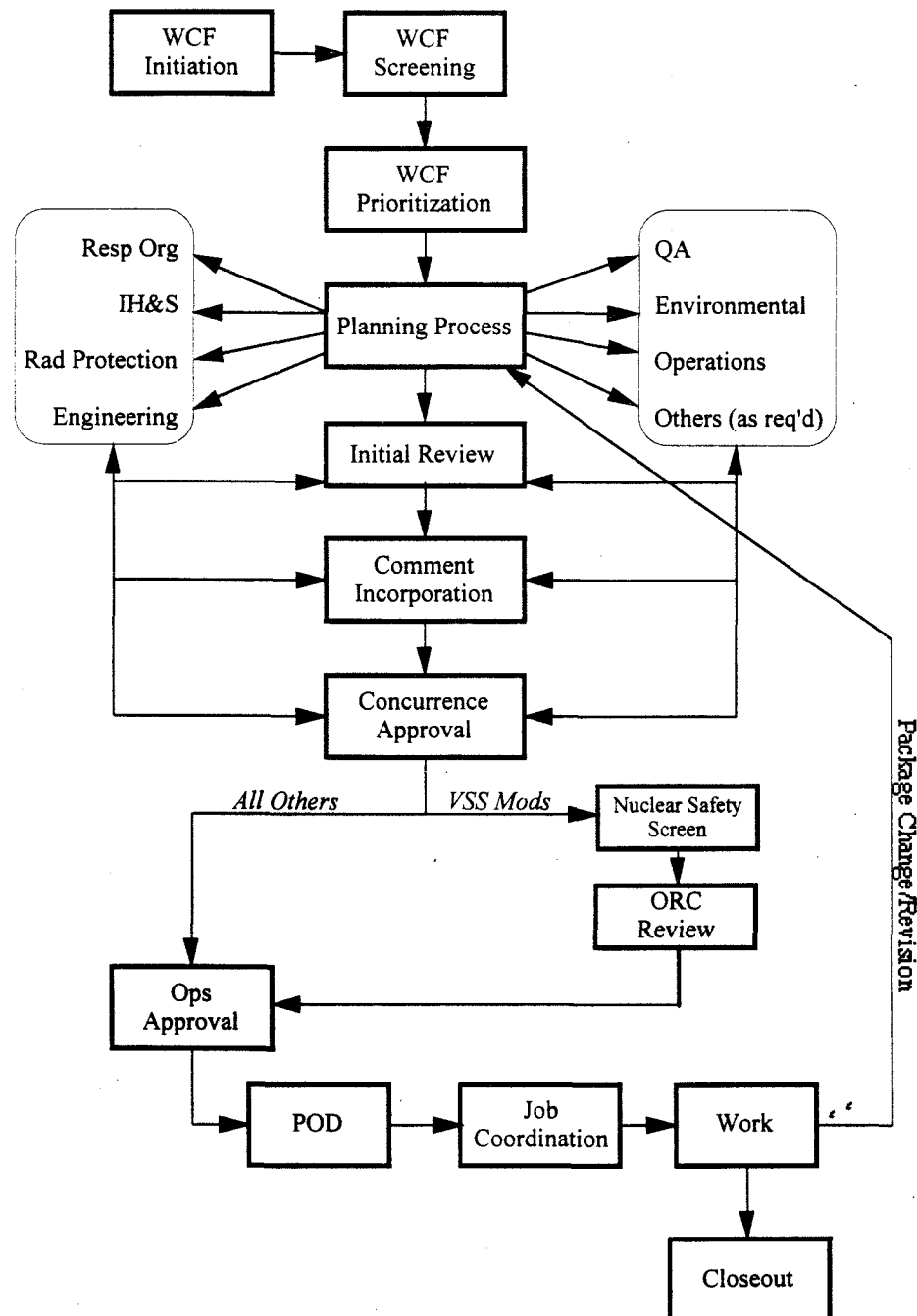
- Establish the Convened Group comprised of senior management representative(s) from Kaiser-Hill and all major subcontractors.
- Identify and establish PDIT's for Work Planning, Work Execution and development of an automated JHA tool. Other PDIT's may be developed if the need arises.
- Establish Goals.
- Develop performance indicators, measure progress, analyze results, and recommend improvements based upon results.
- Provide training for the Convened Group, PDIT's and WT's.
- Identify pilots for initial demonstration.
- Identify and establish WT's comprised of the appropriate mix of technical and craft personnel.
- Conduct EWP Baseline EWP Employee Feedback Survey (Appendix 1).
- Launch Pilots.
- Perform a post job review on each job (Appendix 1).
- Work with WT personnel and management, providing assistance and coaching throughout the entire work control process and improvement process.
 - 1) Review and refine scheduling accuracy
 - 2) Review and refine job coordination.

- 3) Assess all post job reviews and recommend improvements to the PDIT Team for disposition, as appropriate.
 - 4) Document the lessons learned.
- Advertise the continuum of progress towards enhanced safety and productivity.
 - Provide periodic reports describing status of performance indicators and process improvements.

8.0 WORK FLOW PROCESSES

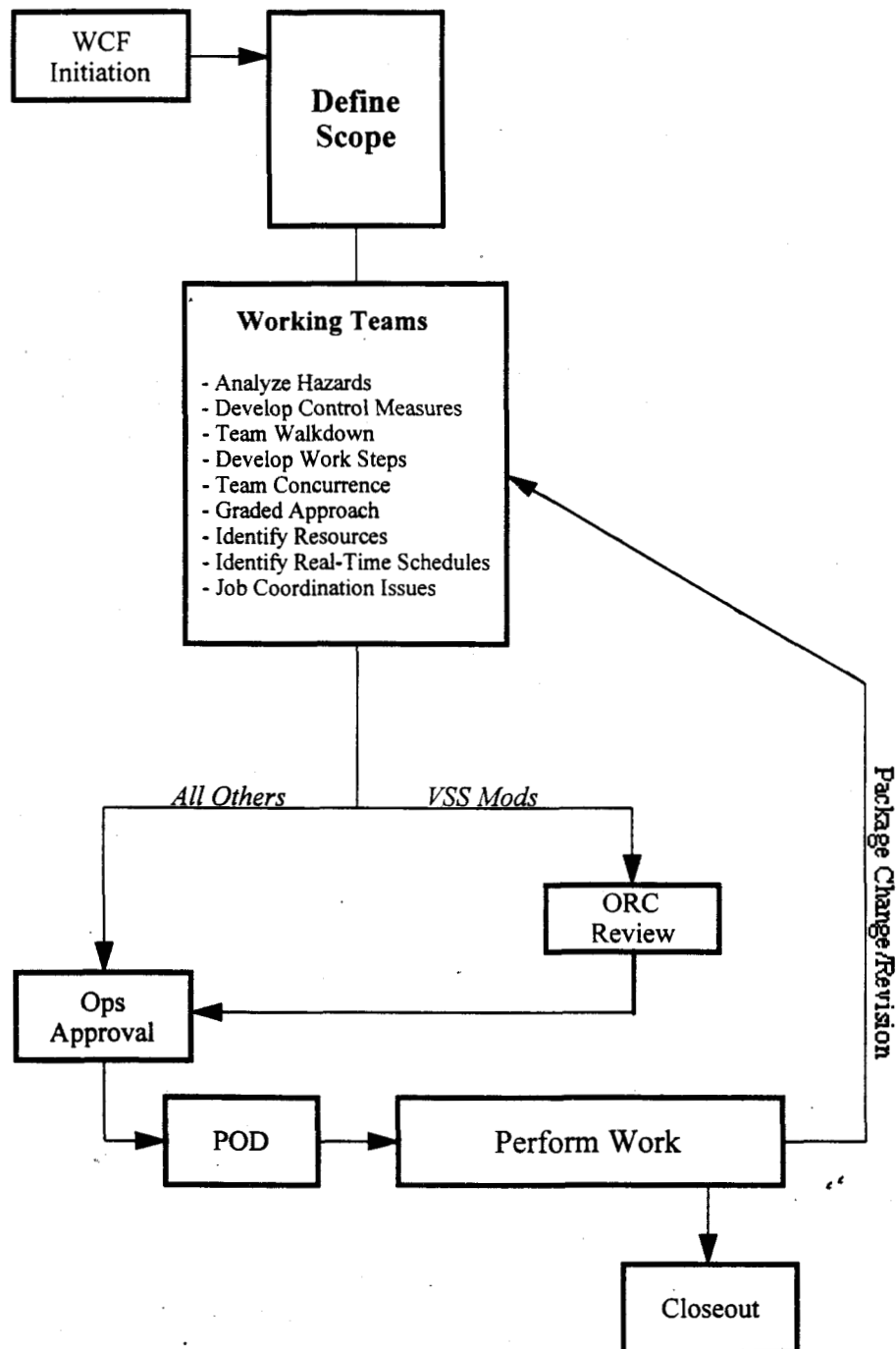
8.1 Existing Work Flow Process with current IWCP

The following diagram depicts the current work flow process at the site with the current Integrated Work Control Program (IWCP).



8.2 Work Flow Process using EWP Concepts

The following diagram depicts the work flow process using the concepts of EWP described in this instruction.



9.0 PERFORMANCE INDICATORS

The Performance Indicators will be measured against the established goals by use of:

- EWP Employee Feedback Survey (Appendix 1)
- Data retrieved from facility/project personnel.

10.0 DELIVERABLES & SCHEDULES

- EWP Implementation Instruction.
- Periodic reports related to performance indicators and process improvements.

11.0 APPENDICES

Appendix 1 - EWP Employee Feedback Survey

This appendix is used to obtain feedback as a means of providing performance indicators.

APPENDIX 1
EWP EMPLOYEE FEEDBACK SURVEY

Page 1 of 2

Instructions:

You are being surveyed on your perceptions of the work environment. Please answer these questions based on your perceptions today. The results will be used to improve the work control process on plant site. Your input is critical. You do not need to put your name on this survey. All individual results will be kept strictly confidential. Please provide comments on the back of this sheet.

1. Your involvement in the work planning process is ...

1	2	3	4	5
I never see the work package until it is approved		I am adequately involved in the up front planning		I am too involved in the planning process.

2. The hazard analysis and controls used for the job are ...

1	2	3	4	5
Inadequate		Adequate for the work performed		Excessive or too restrictive

3. My understanding of the safety requirements for my job is ...

1	2	3
Inadequate		Adequate

4. Teamwork among the appropriate workers is ...

1	2	3
Inadequate		Adequate

5. The technical accuracy and workability of work instructions are ...

1	2	3
Inadequate		Adequate

6. The level of detail in work instructions are ...

1	2	3	4	5
Not enough detail		Correct amount of detail		Too much detail

7. Craft knowledge to perform work is ...

1	2	3	4	5
Not used enough		Adequately used		Excessively used

8. On-the-job supervision is ...

1	2	3	4	5
Too little		Adequate		Excessive

APPENDIX 1
EWP EMPLOYEE FEEDBACK SURVEY (continued)

Page 2 of 2

9. The overall time to plan, review and approve a work package is ...

1	2	3	4	5
Not sufficient		Adequate		Too long

10. My opinion regarding how long it will take to do the job, and what resources are needed is ...

1	2	3
Never considered		Always considered

11. The work is performed as scheduled ...

1	2	3
Rarely	Always	

12. The people needed for me to perform my job as scheduled are ...

1	2	3
Rarely at the right place & time	Always at the right place & time	

13. The parts and equipment needed for me to do my job as scheduled are ...

1	2	3
Never available when needed	Always available when needed	

14. The correct paper (work package, permits, etc.) needed for me to do my job as scheduled are ...

1	2	3
Never available when needed	Always available when needed	

15. I feel that my opinions regarding "doing the job safely and efficiently" are ...

1	2	3
Never considered	Always considered	

16. I feel that the EWP principles to help me to work safer and more productive are ...

1	2	3	4	5
Not working at all	Making a positive improvement			Being overly applied